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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,849	01/29/2004	Tatsuki Igarashi	248347US3	2357
22850	7590	08/05/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TRAN, DIEM T	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/765,849	<b>Applicant(s)</b> IGARASHI ET AL.	
	<b>Examiner</b> Diem Tran	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-17 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

This office action is in response to the amendment filed on 5/31/05. In this amendment, claims 1, 2, 6, 9, 16 have been amended and claim 8 has been canceled. Overall, claims 1-7, 9-17 are pending in this application.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Claims 1-7, 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuenstler et al. (US Patent 6,594,990) in view of Gomulka (US Patent 6,865,883).*

Regarding claims 1, 2, 6, 7, 9, 10, Kuenstler discloses a method for forcibly regenerating a catalytic regeneration type particulate filter (10) in an exhaust pipe through which exhaust gas flows, by adding fuel to the exhaust gas upstream of the particulate filter, the added fuel being oxidized on a flow-through type oxidation catalyst (9) before the particulate filter to produce exothermic heat with which captured and accumulated particulates in the particulate filter are burned off (see col. 4, lines 4-5, col. 5, lines 4-7), thereby forcibly regenerating the particulate filter, the method comprising, in light-load engine operation areas upon forcible regeneration of the particulate filter, intentionally increasing an engine load by switching on electrical devices and increasing an amount of fuel injected so as to compensate reduced torque due to the

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increased engine load (see col. 1, lines 60-67, col. 4, lines 21+, col. 6, lines 19-25, 44-54); however, fails to disclose increasing an engine load by using a retarder to brake the engine. Gomulka teaches that it is conventional in the art, to utilize a retarder assembly for braking the engine to increase the engine load that in turn to increase the exhaust gas temperature (see col. 3, lines 58-64).

It would have been obvious for one having ordinary skill in the art, to have utilized the teaching of Gomulka in the Kuenstler method, since the use thereof would have provided an effective means to increase the engine load so as to increase the exhaust gas temperature for filter regeneration.

Regarding claims 3, 11, Kuenstler further discloses that an entrance temperature of the flow-through type oxidization catalyst is detected and a load on the retarder is feedback-controlled so as to raise a temperature detected up to a target value required for catalytic activity (see col. 1, lines 60-67, col. 4, lines 21+, col. 5, lines 22-30, col. 7, lines 1-6).

Regarding claims 4, 5, 12-15, Kuenstler further discloses that an intake flow rate is decreased and the amount of fuel injected is increased so as to compensate reduction of the torque (see col. 6, lines 61-67, col. 7, lines 7+).

*Claims 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuenstler et al. (US Patent 6,594,990) in view of Gomulka (US Patent 6,865,883) as applied to claim 7 above, and further in view of Tashiro et al. (US Patent 6,622,480).*

Regarding claim 16, the modified Kuenstler method discloses all the claimed limitations as discussed in claim 7 above, however, fails to disclose that filter comprises a particulate filter

having a porous honeycomb structure and ceramic material. Tashiro teaches that it is conventional in the art, to utilize a particulate filter having a porous honeycomb structure (see col. 10, lines 27-30).

It would have been obvious for one having ordinary skill in the art, to utilize the teaching of Tashiro in the modified Kuentler method, since the use thereof would have been routinely utilized by one having ordinary skill in the art.

Regarding claim 17, Tashiro further teaches that said particulate filter has a ceramic material (see col. 10, lines 27-30).

### ***Response to Arguments***

Applicant's arguments filed on 5/31/05 have been fully considered but they are moot in view of a new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Conclusion*

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:30 a.m.- 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DT  
July 29, 2005



Diem Tran  
Patent Examiner  
Art unit 3748



THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700